

IN THE CLAIMS:

1.-10. (cancelled)

11. (new) Nanocomposite blends containing

a) polyamide (PA) from 55 to 95% by wt.,

b) polypropylene (PP) from 4 to 40% by wt.,

c) nanodisperse phyllosilicates from 1 to 9% by wt. selected from the group of natural sodium montmorillonite, hectorite, bentonite, or synthetic mica modified with onium ions and having a cation exchange capacity of 60 to 150 mval/100g,

d) polyolefin copolymers, especially copolymers of ethylene with unsaturated carboxylic acids, up to 1.9% by wt., that may contain common stabilizers and fillers in addition to this composition of 100%by wt. total.

12. (new) The polymer nanocomposite blends according to claim 11 wherein component a) is a polyamide 6 with a solution viscosity from 2.2 to 4.0, preferably from 2.4 to 3.5., the solution viscosity being measured in a 1% solution of 96% sulfuric acid at 25°C.

13. (new) The polymer nanocomposite blends according to claim 11 wherein component b) is a polypropylene with a melt-flow index from 1 to 110, preferably from 5 to 30 ccm/10 min (230°C/2.16 kg).

14. (new) The polymer nanocomposite blends according to claim 12 wherein component b) is a polypropylene with a melt-flow index from 1 to 110, preferably from 5 to 30 ccm/10 min (230°C/2.16 kg).

15. (new) The polymer nanocomposite blends according to claim 11 wherein component d) is contained in the nanocomposite blends at 0.1 to 1.9% by wt. and preferably is an ethylene acrylic acid copolymer or an ethylene methacrylic acid copolymer that is partly or fully neutralized with metal ions.

16. (new) The polymer nanocomposite blends according to claim 12 wherein component d) is contained in the nanocomposite blends at 0.1 to 1.9% by wt. and preferably is an ethylene acrylic acid copolymer or an ethylene methacrylic acid copolymer that is partly or fully neutralized with metal ions.

17. (new) The polymer nanocomposite blends according to claim 13 wherein component d) is contained in the nanocomposite blends at 0.1 to 1.9% by wt. and preferably is an ethylene acrylic acid copolymer or an ethylene methacrylic acid copolymer that is partly or fully neutralized with metal ions.

18. (new) The polymer nanocomposite blends according to claim 14 wherein component d) is contained in the nanocomposite blends at 0.1 to 1.9% by wt. and preferably is an ethylene acrylic acid copolymer or an ethylene methacrylic acid copolymer that is partly or fully neutralized with metal ions.

19. (new) A method for producing polymer nanocomposite blends wherein the components

a) polyamide (PA) from 55 to 95% by wt.,

b) polypropylene (PP) from 4 to 40% by wt.,

c) nanodisperse phyllosilicates from 1 to 9% by wt. selected from the group of natural sodium montmorillonite, hectorite, bentonite, or synthetic mica modified with onium ions and having a cation exchange capacity of 60 to 150 mval/100g,

d) polyolefin copolymers, especially copolymers of ethylene with unsaturated carboxylic acids, up to 1.9% by wt., that may contain common stabilizers and fillers in addition to this composition of 100% by wt. total are compounded at temperatures above the melting points of the polymers involved in an extruder or kneader.

20. (new) The method according to claim 19 wherein the components are compounded in one step.

21. (new) The method according to claim 19 wherein components c) and d) are first worked into parts of component a) to form a master batch which is compounded in a second step with component b) and the remaining quantity of component a) and then processed further.

22. (new) The method according to claim 19 wherein components d) and b) are first compounded in an extruder or kneader at temperatures above the melting points of the polymers involved and component c) and a part of component a) are worked in to

produce a master batch which in a next step is compounded with the modified polypropylene and the remaining quantity of component a) and then processed further.

23. (new) The method according to claim 19 wherein components d) and b) are compounded in an extruder or kneader at temperatures above the melting points of the polymers involved to become a modified polypropylene and in a next step this modified polypropylene compounded with component a) and component d) and then processed further.

24. (new) Use of the nanocomposite blends according to any one of claims 11 to 18, produced according to one of claims 19-23, as extrudates, injection-molded parts, or fibers.